

Last Resort Hotel Final Report

Allocation of work

Starting with the Database, each group member did ¼ of the hotel description. The first ¼ was done by Sophie, next by Maria, the third by Mya, and last by Raina. On Zoom, we reviewed all the tables we came up with and narrowed them down to the most efficient.

After Milestone 1, Sophie updated the tables based on the professors' feedback. From there, Mya populated the database using Excel and Python. The SQL queries were done by Maria and Mya, but tested and updated by Mya, the wireframe and website by Raina, database connection to the website by Maria, the code was tested by Sophie, and finally, the report was written by Maria.

The app.py is the important file, we only used the Excel file to populate the database but later modified some things directly in SQL. The website is pulling the information from the SQL file rather than the Excel

Assumptions for database

In the project's initial phase, the database will only hold information for one building (the "main" building). The rooms within the hotel are strategically allocated, with meeting rooms situated solely on the first floor and sleeping rooms occupying floors 2 to 4. Meeting Rooms and Sleeping Rooms are completely separate, meaning a meeting room can't be used for sleeping and sleeping rooms can't be used for meetings.

Facilities (pools/patios) are treated as meeting rooms to us. We are not tracking their location since we are not making a hotel map. An important detail to remember is that the rooms are standardized, with both beds being the same type (e.g., both queens or both full) instead of one twin and one queen.

For now billing procedures are simplified, with only one individual designated to making the reservation or advanced deposit for both meeting rooms and sleeping rooms, even if the reservation is for a group of people. While the ability to split bills is a future consideration, it is not part of our current phase.

The front desk staff/concierge is only responsible for making reservations, fulfilling services like room service, and directing customers' calls to another set of staff. Because of this, there can only be one staff member per reservation made. For staff members to see room availability, they can just look at the diagram on the computer rather than us connecting the card to the staff.

To keep customer information confidential, regardless of the customer allowing messages to be transmitted by the hotel, only guests will have the card to record when they use a meeting or facilities room.

All individuals are classified as guests, whether lodging or using meeting or event facilities. However, not all customers are required to pay, as one designated individual associated with the reservation assumes responsibility for payment. There will be advanced deposits in some cases, but only any deposits made two years or more before the check-in date. Customers will only sleep or have a meeting in one room per visit. Meeting room reservation time slots are breakfast, non-eating, lunch, and supper.

A couple of things to note:

- The data was populated on April 29, 2024, so any check-out date after that has technically not happened even if they have in real life
- All reservations are from 1/1/2023-4/29/2024

Suggestions to management

After learning about the business and how it functions, we have come up with a few suggestions for management. To start off, we do not think that a meeting room should ever be a sleeping room by bringing in rolling beds, they should be held as two completely separate rooms, each serving its own purpose. Eventually we think it would be a good idea to hire a graphic designer that can make a map of the hotel. We believe it would be more helpful as an image, especially since that information is static, therefore we do not need to include the location of rooms in the hotel in specific detail (wings, adjacent rooms, connecting rooms, floor, wing, building, facilities, etc). For now, we do not need to worry about a billing party since, technically, an individual will be making that payment. However, the fact that billing parties are not available right now doesn't mean they aren't important to customers, eventually they should have the ability to split the bill. Finally, management must do everything possible to make sure all customer information remains confidential at all times.

Initial Analysis

The database has allowed us to come up with some great recommendations for improvements in the hotel that could work out in the long run. With the database we were able to find out which room performs best. Our research found that rooms with 2 bedrooms are the best-performing sleeping rooms. If the reason for this is solely because of the two bedrooms, then when management decides to add new rooms or expand the hotel, it could be beneficial to create more rooms with two bedrooms.

Our research also found that massage services are the most sought-after service the hotel offers. Although it was above other services, it was only used twice. There is a lot of room for improvement with that. Management could invest money into employee training to ensure the spa provides customers with what they want. Another good idea can be to expand services to a broader group of people. Open the spa up to yoga or facials, ranging in price for all customers.

For customers we also recommend a loyalty program that recognizes your top clients. For example, all customers can earn points for money spent staying at the hotel, which can later be used for a number of other things. They can save points to earn a free night or use them to get a discount at the spa. For example, if Jacob Allen reaches \$1500 in charges he gets a complimentary upgrade during his next stay. One can implement this loyalty program in many ways, but it's important to make sure customers feel that they are important to the business.